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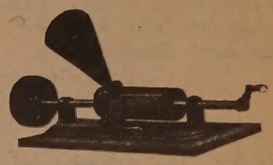
THE NEWSPAPER FOR THE HOBBYIST OF VINTAGE ELECTRONICS AND SOUND

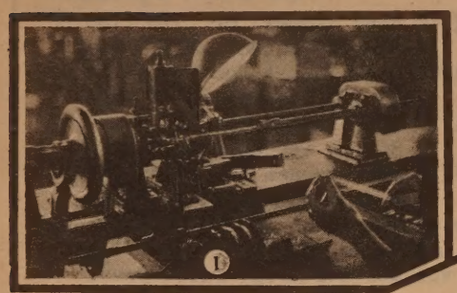
THE HORN SPEAKER



PHONOGRAPH CENTENNIAL 1877 - 1977

MAKING OLD TUBES

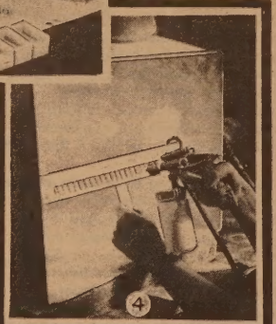
By ARTHUR H. LYNCH
in collaboration with
EDWARD CARON



(1) This is an automatic grid winding machine. Two heavy support wires are run through a revolving head—at the extreme left of the picture. As these two support wires revolve, being driven by the motor which operates the revolving head, they pick up a fine wire which is run at right angles to the support wires and evenly spaced along the support wires. The machine is automatically controlled for any number of type of tube for which the grids are to be used. This makes one long grid, the entire length of the support wires.

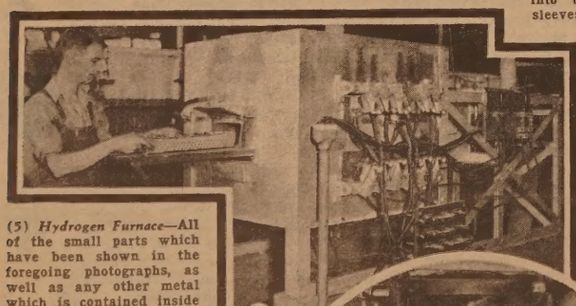
(2) *Cage Assembly*—The operator is using a foot-controlled electric welding machine. The upper arm of the welding machine makes contact with the metal elements which the operator is holding.

(3) *Cathode Assembly*—Here the operator is shown placing the special alloy filament wire into the Isolantite insulating sleeves.



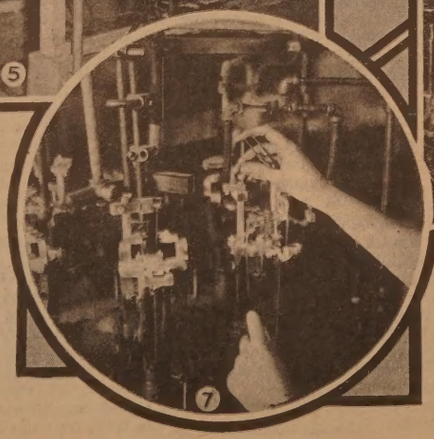
(4) *Cathode Spraying*—After the operation shown in Figure No. 3, groups of the individual cathodes are placed in a spraying hood and given a coating of prepared chemicals by means of the spray gun which the operator holds in her right hand. The performance and the ultimate life of the heater-type tube depends, to a very large degree, upon the uniformity of the spraying mixture itself as well as the uniformity with which it is applied.

This is one of the most important operations of the cathode.



(5) *Hydrogen Furnace*—All of the small parts which have been shown in the foregoing photographs, as well as any other metal which is contained inside the glass envelope of the tube, are placed in this furnace before being assembled.

(6) *Automatic Flare Machine*—Long lengths of glass tubing are placed in the revolving chucks which are shown at the top of this machine. These chucks feed the glass tube, at a predetermined, desired length, into a number of gas flames. There are eight sets of gas flames which the tube passes through from the time the operation starts until the flare is finished. Each different position is accompanied by an increase of temperature of the flame acting upon the glass tubing as the process develops. At the position shown directly before the operator is a revolving steel flare cutting disc.



(7) *Stem Machine*—The operation shown in this picture is worked out in six different positions which are automatically rotated by the machine. The result is the inserting of the necessary lead wires which connect the elements of the tube to the prongs of the tube base, which in turn goes into the socket of the radio receiver. The small glass tube, which is shown in the operators hands, is used in a later operation for evacuating the entire tube. It joins the flare at a point where the lead wires are sealed into the glass.

* Plant Superintendent, Triad Television Mfg. Co.

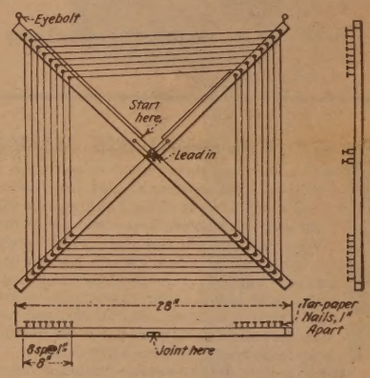
CONSTRUCTION OF A LOOP AERIAL.

I am presenting an indoor aerial which I made and designed. It is simple in construction and can be made for about seventy-five cents.

As there are some amateurs who do not have the opportunity to buy and erect large aerials, I think this one is just the thing.

Here are the directions to erect an indoor aerial:

Take two boards 6′ long and 2″ square wide, and 1″ plane, and sandpaper them.



Such a Loop Used With a Detector and Two-Step Amplifier With Regenerative Effect Will Pick Up Radio Concerts Easily Within About 12 Miles of a Station.

then make your joint in the center. When this is done, nail them with tar paper nails, starting 1″ from each end, as shown in the illustration.

Take your annunciator wire and begin winding, as shown. After this is done, put two binding posts on the spots designated in the illustration, and connect the ends of the two wires to these.

Contributed by
ALPHA E. WATSON, JR.

Radio News for April-May, 1922

ANTIQUE RADIO CLUBS

Antique Radio Club of America
c/o Mr. Bill Denk
81 Steeplechase Rd.
Devon, PA 19333

Antique Wireless Association
c/o Mr. Bruce Kelley
Main Street
Holcomb, NY 14469

Buckeye Antique Radio and Phonograph Club
c/o Ken Longenecker
1937 Stoney Hill Dr.
Hudson, OH 44236

(Both continued on page 10)

LETTERS

Dear Sir:

Can anyone tell us about the origin of the "Hotwater Bent Radio" ad? What brought about this advertising?

Always look forward to receiving "The Horn Speaker".

T. A. Drogoski
507 Coal Valley Rd.
Clairton PA 15025

Editor...The "Hotwater" ad originally came from Radio Craft magazine of December 1931. Probably, the editorial staff of that magazine made it up.

Gentlemen:

I picked up a rather old-looking radio from a junk shop and am trying to find out anything about it. I wrote RCA and they referred me to your address. The information on the inside read as follows:

Socket Power
Model AP-1019
No. 103629 uM
Input volts 105/125 cycles 60
Primary Input Amp. 1.52
Supplied by
Radio Corporation of America
N.P. 37618

It is in a Stromberg-Carlson cabinet which is 50" high - 44 inches wide and 20 inches deep. There is an old phonograph-turntable in the upper right corner, and a large loop antenna in the lower left side. All tubes seem to be there, but it does not work. Any information or advice about this baby would be greatly appreciated.

Sincerely,
Ted Muterspaw
1900 N. Van Buren St.
Wilm., Del. 19802

Editor....Congratulations on the fine old radio-phonograph combination. Your model AP-1019, which was probably made in the early 30s, is becoming popular and finding a prominent place in collectors' displays. You will be able to locate technical information about your set from one of the advertisers in The Horn Speaker.

Dear Jim:

As per your request, I enclose a somewhat long-winded history of one of my radios. I keep a diary on all of them, and this is a copy of my handwritten loose-leaf notes.

I don't know how much interest this would be for the readers of the "Horn Speaker" as I think one would have to be an engineer, or experienced in a lot of radio service work, to appreciate the things I did with this radio. There is a lot of technical stuff in this history.

All of my sets have a similar history. Most of the older radios are restored to original, but not changed. Since I am an electrical engineer, I enjoy second-guessing those who design radios, and have a lot of fun trying to improve the radios in the collection. Often I can improve a set without adding any money to it, and sometimes even by taking stuff

BACK ISSUES
The Horn Speaker

All 10 back issues for 1973...$8.00
Single issues...$1.00 each
All 10 back issues for 1974...$6.00
Single issues...$.75 each
All 10 back issues for 1975...$5.00
Single issues...$.75 each
All 10 back issues for 1976...$5.00
Single issue...$.75 each
Any single issue of 1977...$.75 each
Later, we should have complete volumes for 1972, first year.

The Horn Speaker
Box 12 Kleberg, Texas
75145

NOW AVAILABLE!! NEW REPRINTS OF THE RAREST LITERATURE

We bet there are alot of unknown collector items laying around in the junk boxes, incomplete...just waiting for this rare literature...our reprint services are the largest in the world...most of the original were taken from our collection...now the GREAT Silent Radio Collectors have came out of the woodwork and made available their originals so we all can benefit and share...we have many more to offer, but selected these only because of opinions from experts and our correspondence...the process is slow and we need your support....much of the following literature does not appear in anytype publications today...this literature is required for historical significance, restoration, reconstruction projects, appraising, and judging...now you can have all by ordering using the following designations: SB (service bulletin) IB (instruction book), B (brochure), CB (catalog book), M (miscellaneous).

The following AMRAD Service Bulletins are very rare..educational,we have made attempt to list the details...most all contain original part and prices, wiring diagrams etc.

CB001 1921 AMRAD CRYSTAL SET: Rare,very First catalog-type-bulletin issued by the American Radio and Research Corp., to promote and sell to the general public this crystal set and their other products, simplified in detail..4p.....$2.95.

SB001 1921-Feb-Bulletin-V: AMRAD Receiving UNITS, all units made in the first year, Each unit assigned name: LDL Variometer, SW-coupler, Crystal Receiver, Variable Condenser, VT-Detector, 2-stage-amplifier, B-Box, each unit can be combined to form 15 different combinations..example 2-Units coupled together Named "The Twinplex", 8-Units connected "The Pounders",All internal views interconnecting wiring and RARE wiring diagrams of each unit..if you have these in your possession...find out the names, if you don't have any you can use this rare literature to rebuilt them..all with dimensions .8pages.....$4.95.

SB002 1921-March-Bulletin-P3: Induction Coil Receiving Sets, 100W system with Murdock Oscillation transformers and condensers-Bunnell Key..2p....$0.95.

SB003 1921-March-Bulletin-Q: Quenched Gaps-Types G-1-1KW, G-2-1-2KW, G-3-1-3KW, and the assigned A-2 systems first used in the U.S. Navy..4p.....$1.95.

SB004 1921-April-Bulletin-W-2: E-Type Wavemeter very rare..first unit to be used as as four functions such as WM, Variometer, Interference, & Preventer..2p $0.95.

SB005 1921-April-Bulletin-R: All standard parts catalog-type...4 pages.....$1.95.

SB006 1921-August-Bulletin-Z6: RARE Part listing and Prices of all AMRAD items made this year all with dimensions of each item where applicable..2p...$0.95.

SB007 1921-Sept.-Bulletin-L: Amrad receiving sets No. 2596, No. 2634, Detector-2-Stage Amplifier, well illustrated, contains all tech. information..4pages $1.95.

SB008 1921-Sept-Bulletin-N: Ampliformer No. 2620 Vernier, Variometer No. 245 parts, rheostats, dials, condensers, tube bases, Grid Leak, etc., 4p.....$1.95.

SB009 1921-Sept-Bulletin-O: New Variometer No. 2602, 2607, Variocouplers No. 11-No.14..like all others very RARE today and well illustrated..2p....$0.95.

SB010 1921-Sept.-Bulletin-T: Twin-Syn-motor No. 2551 included in the system along with the U. S. NAVY MODEL L 1/2 KW 500 cycle Transmitter(1250.00).2p.$0.95

SB011 1921-Oct.-Bulletin-X: Rare long wave tunner-type 2492 Type-F, also listed; ARCSETS No. 2492, 2309, 2227...profusely illustrated...2p.....$0.95.

SB012 1921 AMRAD SERVICE BULLETINS BOOKLET: Save us some time by ordering CB001, PLUS SB001 through SB011 all in one package for ONLY.....$9.95.

IB001 1925 FRESHMAN MASTERPIECE -5 tube-TRF Radios Instruction Book: By A. W. Franklin, Chief Engineer; MODELS Illustrated: 5-F-1, 5-F-2, 5-F-4, 5-F-5, 5-F-6, 5F-7, Concert, Masterpiece, also are schematics, tunning charts, sub panels, Eliminators, all parts, cabinets, complete troubleshooting charts, adjustments to Grid Leaks..very interesting..well illustrated 28p...$4.95

for those who want to remember...

For those who want to learn...

IB002 1925 FREED-EISEMANN RADIO INSTRUCTION BOOK: by Joseph D. R. Freed President and Chief Engineer, Complete Installation and Operations data for all models made in 1925..Antennas, reception-all types-remedies,batteries, tubes, New and Old, Loud Speakers, list of Broadcasting station-world-wide building these radios, memorandums PLUS Rare history of this company photos, illustrations varies..rare...32 pages.....ONLY.....$4.95

IB003 1925 FREED-EISEMANN MODEL NR7 Neutrodyne Instruction Book,photos, we have added the schematics to this..plus you get a F-E-Radio-Log...this material will display well with radio..6p..$2.95,With IB002 Both.$5.95

CB002 1925 ELECTRIC SUPPLY AND EQUIPMENT COMPANY CATALOG NO. 14: This Rarest and best illustrated RADIO catalog we have ever seen..Radio was New the ES & EC were distributors (6 major locations Eastern) to dealers..this is the first catalog book published, therefore we will go into detail its contents, note each page will be suitable for framing if you want to pull it apart, here is: Musicmaster-Ware models: 50,60,100,140,175,215,250,300,400, 460-(each page for each model) Speakers: V, VIII, XI, XII, XIII, 14" & 21" Horn Speakers, Weston Parts; Kolster Models: 6-A,6-B,8-B,8-C, BRANDES: Speakers: HORN types-Table Talker, "H", H-type in cabinet, Cone, Superior Headsets, Navy-types; Eagle models: Neutrodyne D, F, C1, C2, C3, Mohawk Models: VA, Masterdine: M-50, Tower Products: Headsets-S-T- Horn Spks: 8 1/2", 13", 14",Meistersinger, Midget Horn, Gold Star Radio Sets: 51, Crystal, C111-1 tubes, C112-2-tuber, C113-3-tuber, ERLA Models:.De Luxe,Standard, all major parts Loop Antennas, RCA TUBES: WD11 plus 11 others, Philco: Parts, Batteries, chargers, Bakkite: Chargers, There are many other major manufacturers and their products listed: From clips to test equipment; Jewell, Universal, Na-ald, Allen-Bradley, Mar-Co, H&H, Dubilier, Keystone,Premier-Ensemble Kit Radios, Karas, Py/RADIOlin,(Dupont), Raco, Bassett, Hafner, Effarsee and Eveready..75 8 1/2 x 11 pages..very educational, ONLY $9.95.

IB004 1928 CROSLEY SHOWBOX MODEL 706 Instruction Booklet..4page..$1.95.

IB005 1924 RADIOLA INSTRUCTION BROCHURE: Models: Radiola III, III Amp, III-A & Super-Hetrodyne (second Harmonic) same as VIII only was the first semi-portable from original fold-out with all wiring and tube hook-up. Supplement 6p..$1.95.

IB006 1921 Q-R-S Redtop-Radio-Tube Sales Brochure w/ all Technical Specs...$0.95.

MC01 RCA COLOR LABEL REPRINTS: These are reprinted in color from the original labels: Model 100-A, 103 Loudspeaker base, and Radiola 64 Super-Heterodyne Labels.. Now you can cut out these labels and glue to the bases of their respective speaker, the 64 to cabinet (bonus) can"t tell from original all 3 on same artwork...$2.00.

MC02 MAGNAVOX CALL LETTER COLOR SHEETS: 2 sheets-brown-yellow of 1776 radio station call letters from CBA-WEAS-WEU-toYNXW reprinted from original sheets, cut out the desired station and add them above the early-push-button radios, each is 1/4" x1/2" will fit most any radio..a must for complete restoration..$2.00.

M003 DIAL CORD STRING AND BELT GUIDE FOR any 1938-1947 Radio: $1 +.13¢ Stamp

NOTE: Need a copy of the new 1977 Radio Antiquers Directory and Collector's GUIDE SERVICES..always changing..everything from A to Z $5.00 COLOR $9.95.

IMPORTANT: UNLESS OTHERWISE SPECIFIED ALL BOOKS SHIPPED BOOK RATE: For First Class ADD $3 per book,Special Handling to 2lbs .50¢, some weigh over; Insurance extra 40¢, 80¢ to $100, Calif. Residents 6% Tax, if in doubt leave your check Blank, We Fill-IN and/or REFUND Excess, PLEASE any INQUIRY, YOU send Postage. CANADIANS: Same as USA, NO Insurance on Air, Payable in US FUNDS, NO STAMPS, ADD $2.50 for your P. Check exchange rate, SAME FOR OTHER COUNTRIES: US Postal Service now requires a week for F/C, BK RATE 3-4 weeks, WE require 10 days to Process and Deliver. ORDERS OVER $30 FREE Bonus, Money-back-Guarantee on all items-15 days, ORDER ALL: Historical Radio Services, Box 15370 Dept.HS1 Long Beach, Ca. 90815, USA

out of the radio!

I spent many years in RF and receiver design, some of that time with McIntosh Labs. The MR-77 and MR-78 tuners are my designs. The MR-78 was the first FM tuner to feature variable selectivity, (1971) but I was simply inspired by all the old radios of the 1930's that used variable selectivity on AM. So I just did it for FM. You may note that all the new Japanese FM tuners are coming out with Variable selectivity (Yamaha, Sansui, Kenwood, and Pioneer all have it on some models).

I could possibly rewrite the things in the diary to try and make an interesting a story as possible, or perhaps do a technical article on some of the points of receiver design, if you wish. Let me know. Thank you for your interest.

Sincerely,
Richard Modafferi
R.D. 1, Skyline Dr.
Vestal N.Y. 13850

Editor...All the technically oriented collectors should read Rich's article, "An adventure With An Oldie."

AN ADVENTURE WITH AN OLDIE
by Richard Modafferi

RCA Year made: 1953
Model 3BX671
Chassis RC-1125
Serial # U052868

Purchased from Herb Snyder, Binghamton, N.Y., April 1973 for $10.00.

This radio was a childhood dream! Saw it years ago when in Junior H.S., and its gaudy chrome dial, multiple knobs, and millions of short wave bands left an everlasting impression. So years later, I snatched it when I saw it.

The radio was all in pieces in a box. All pieces there. Spent a few days putting it together. Got an almost unreadable copy of the Sam's for the set, and spent a few days putting it together and getting it going. To soup up the top 4 SW bands, removed the 15k resistor, R6, in plate of the 1U4 RF stage, and replaced it with the 75uh McIntosh RF choke (SRF is 10.7 MHz). This is a very good RFC to use in the SW bands. This really hotted up those top 4 bands. Redid RF-IF alignment.

Cabinet is real leather. Oiled and polished it. Shined up the chrome. This is a garish, gaudy radio. All glitter. It must have attracted attention on the beach or at a camp. The thing must have weighed 25 pounds with the big A-B battery pack in it.

Was able to soup up the top 4 SW bands a little more by putting 22uuf in series with the whip antenna. This raised the Q of the antenna circuit, and improved the image rejection.

On 7 August 1976, did something to the set that I always wanted to do: add an IF stage to it! The selectivity wasn't good enough, especially on SW, and the AGC performance could be improved. This is a pretty tricky project, and did a lot of study before tearing the radio apart. In particular, a lot of engineering pitfalls await the unwary who play with a high-grain circuit using series-connected battery tubes!

Took 2 IF transformers out of an old Admiral console in the attic. Removed 1st If transformer from the RCA. Mounted the 2 new IF transformers on both sides of the hole just vacated by the old RCA input IFT. Then filed the old IF hole and fitted a new 7-pin wafer socket to receive the new IF tube, to be located between the 2 new IF transformers.

All wiring fell neatly into place with good, short leads. Stuck the filament of the new IF stage between the old IF (Now the 2nd IF) and the converter. Isolated the two IF filaments with the ubiqitous McIntosh 75 uh RF choke. (You use these chokes like seasoning in any engineering design - if you think it won't work, or it will oscillate, just stick them in - anywhere!)

Took AGC off the converter tube. It now runs on fixed bias thru 3.3 meg returned to its own filament. Returned grid of new 2nd IF to the next filament down the line thru 1.0 meg to produce -1.5v bias on the 2nd IF. So now the set has fixed bias on the new 2nd IF and the converter. AGC is on just the RF stage and the new 1st IF.

The radio "tailbited" in the BC band on the 2nd harmonic of the IF (910 KHz). Fixed this with another 75uh choke between the RF and detector filaments (input to output!). Empirically added two 0.15uf bypass capacitors to various spots in the filament string to cool off regeneration.

Radio is now super sensitive and selective, with very good AGC action. Fading signals on the SW bands don't pull the oscillator anymore, with the AGC off the converter.

The tone controls don't have enough range - you can't turn the BASS down enough, or the TREBLE up enough. Fixed this by removing the .0018 across the output transformer, and changing the .001 in the TREBLE control to .0033, and .001 in BASS control to 330uuf. Also, stuffed the battery compartment of the radio with some plastic foam. The set now has better audio, and the tone controls have enough range to do something.

On 8 August, 1976, I noticed that if you turn up the BASS on SW, the set will tend to motorboat on strong signals. This was puzzling. There was also a hum. So took set apart. Made an awful discovery. One of my new IF transformers had a short from B-plus to the can! This put B-plus on the chassis, and made the chassis hot with B-plus and RF energy coupled thru the RF B-plus bypass capacitors! So I dismantled the first IFT. Had to pull the 1st IF tube, and it broke in my fingers as it came out! A piece of glass went deep into third finger of right hand and had to race to the bathroom to bandage it! Wiped up the mess and continued.

Fixed the short and reassembled the radio. There was a little bit of regeneration in the IF, and was able to fix it by seasoning the circuit with another 75uh RF choke, this time between the II6 and the adjacent IF tube filament. Also added another filament bypass capacitor there.

Had to carefully adjust and change the various filament (cathode-current) bleeder resistors in the filament string, to bleed the plate currents, so that all the tubes had 1.3 to 1.4 volts across the filaments with the line voltage switch at NORMAL. Drop across the entire string, including the drop across the RF chokes, is now 11.8 volts.

The AGC needed work - the noise quieting curve wasn't very good, like the RF stage was getting too much AGC on weak signals. Studied the schematic, and the RCA tube manual, for tubes with optimum AGC characteristics for the new circuit. After a lot of work, andrearranging of the AGC bias dividers, etc, etc, wound up with 1T4's in the gain-controlled stages (RF and 1st IF) and a 1L4 in the 2nd If. Set it up so that the 1st IF would have a lot of gain reduction before the AGC began to come onto the RF stage. This meant that the RF would draw a little grid current on weak signals, but this didn't seem to mess anything up. Found out I had to redo the filament bleeder resistors again - the 1L4 and 1T4 draw a lot more plate and screen current than the 1U4.

Put 2.2uh choke in series with the whip antenna. So the antenna is now in series with 22uuf and 2.2uh. This resonates the antenna on the top two bands and the pickup really went sky-high. The Q of the antenna coils also improved, and the image rejection on 16m and 19m is really now pretty good.

Radio really plays good - it works as well as any general-coverage communications receiver and is really fun as an SWL radio. You can really hear the good quieting of the AGC on strong signals, and the set will quiet rapidly on a weak signal. Can receive the BBC on 15.07 Mhz all day long - a lot of sets won't do this. BC band is really hot and can get a station on every channel, even in the daytime.

So, all's well that ends well. This was an ambitious project - re-engineering a radio, and it's one of the things that makes radio collecting fun and challenging.

In Fall of 1976, put an AD in "Horn Speaker" to try and get a readable copy of Sam's for the radio, and also, a copy of the owner's manual. Got a reply from Mr. Nicholas Vaksvik of Los Altos, California and he sent me the schematic and manual, and the whole life-history of HIS radio! It was on camping trips, and was even buried underground once to

prevent its being stolen! Still works. Mr. Vaksvik is interested in the improvements I made to mine and may want to try some of them, we are corresponding.

So this is the history of this set up to the present.

Club News

WESTERN NEW YORK ORGANIZES FOR A WIRELESS CLUB

The first meet to organize a Wireless Club for the Western New York area was held Sunday afternoon Feb. 27 at the Old Amherst Colony Museum in E. Amherst, New York.

The meet was held as a function of both the museum and the yet unnamed club. Advance publicity in the Courier Express, mailings by the museum and a talk show interview of Dick & Ann Schamberger on WBEN radio, plus spots on other stations helped inform the general public of our efforts.

A number of members brought in some of their most collectables for display. Outstanding sets were Federals, Kings,and Wurlizters, all Buffalo products. The hit of the show was Ken Conrad's 1916 Spark gap/loose coupler set. Later seen on local TV news spots.

A successful swap/sell session was held, followed by a business meeting designed to find out the attendees views on a club. Volunteers for the initial board of directors was Dick Schamberger, Larry Babcock, Chris Fandt, Ray Sieracki, Ed Lindberg, Jim Kreuzer, Ken Conrad, Jim McGraft, Art Albion and Van BanBrooks. Approximately 60 people signed up as being interested in forming a local club. The first board meet will be held on March 30th.

The club already has a scheduled activity for March 25 & 26. We will have a display with members in attendance at a Ham show in a local shopping mall.

The business meeting was followed by a short talk & demonstration on building a solid state power supply for operating battery sets by Dick Schamberger.

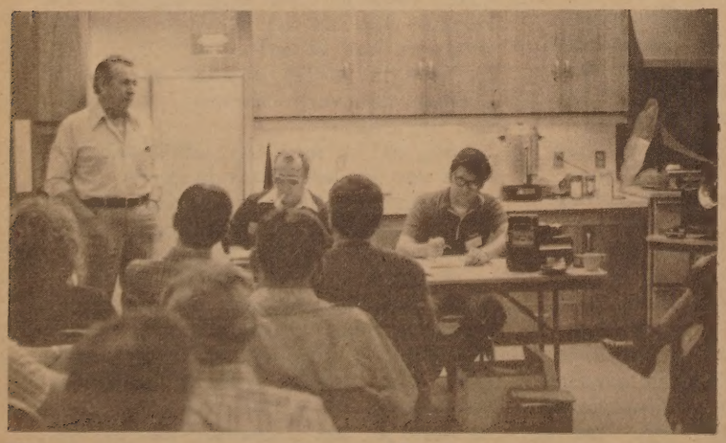
The next full meet will soon be planned. For further information contact: Dick Schamberger, 1975 Hertel Ave., Buffalo N.Y. 14214 or Larry Babcock, 8095 Centre Lane, E. Amherst N.Y. 14051.

Two local products on display at the meet, a Federal Jr. (with original blueprint & manual) plus a Federal 110. Both belonging to Dick & Ann Schamberger.

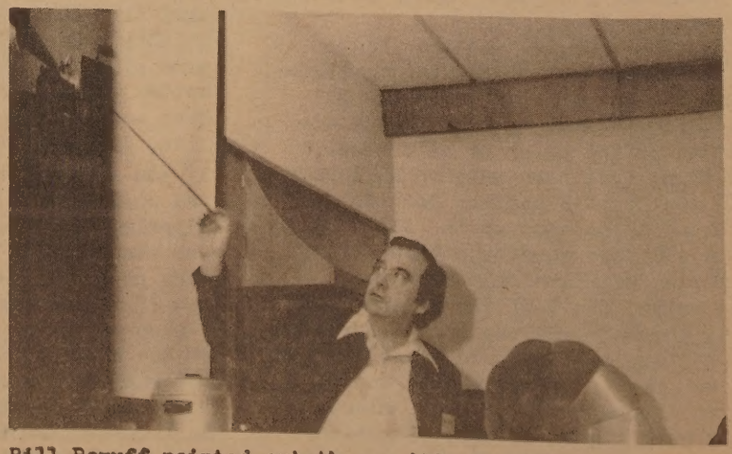
SOUTHWEST VINTAGE RADIO AND PHONOGRAPH SOCIETY

If you like the thrill of finding the old phonograph or radio for which you have been searching, why not go and hear the chants of an antique phonograph and radio auction to be held April 16, 1977 by the Southwest Vintage Radio & Phonograph Society. This auction, open to all to buy and sell, will be in the auditorium at the Texas Power & Light Company, 519 Lockwood, Richardson, Texas. The doors will be opened at 2:00 p.m. for auction check-in. The auction itself will begin about 6:00 p.m. A 10% "donation" is charged for items sold.

For more information please contact Glen Zook, secretary of SVRPS, 410 Lawndale Drive, Richardson, Texas 75080, or call Glen at (214) 231-3987 evenings. He will be able to tell you how much fun you can have.



Clarence Johnson, standing, tells about the old radio display at WRR radio station. Bob Sullivan, next and seated, is president of Southwest Vintage Radio and Phonograph Society. To the right is Glen Zook, secretary.



Bill Boruff pointed out the exciting sculpture of phonographs at a regular Southwest Vintage Radio and Phonograph Society meeting.

THE "MYRT AND MARGE" CAST: Standing, left to right: Tad Smith (played by Bob Walker), Lizzie Lump (Marjorie Crossland), Barney Belzer (Maurice Tarplin). Seated: Max Woodard (Wendell Holmes), Myrt (Myrtle Vail), Marge (Donna Damerel), Clarence Tiffingtuffer (Ray Hedge). Front: Chris (Warren Mills), Midgie (Betty Tyler)

First Families of Radio

Mother and daughter dramatize their own lives in "Myrt and Marge"

BACK in the 1920's, Mr. and Mrs. George Damerel and their daughter Donna were doing all right on the vaudeville stage. In 1931 they were so well fixed that they retired to enter the real-estate business. Then came depression and bank failures and financial distress for the Damerels. That was when Myrt got her "million-dollar idea." She turned back to the only thing she knew, created, wrote and directed a radio serial show—one of the first—which, with several novel changes, retraced the experiences of herself and daughter Donna. Almost a decade has passed, but the "Myrt and Marge" show (CBS, Monday through Friday) which she created continues to be a favorite with serial listeners. It is the story of the careers of two show-girls in a theatrical company. Myrt, a wily veteran of ten seasons, meets and makes friends with Marge, a shy, uncertain beginner. Later, they discover that they are actually mother and daughter. Passing time brings them success beyond the fondest dreams of their tinselly vaudeville days, for they both become top-ranking radio and film stars. But Myrt is still the warm-hearted trouper of old and Marge has lost none of her youthful charm and enthusiasm. Current episodes find Myrt and Marge about to be involved in the nefarious activities of one of the backers of their latest theatrical enterprise. "Pop" Tiffingtuffer, excitable costume designer, is their most devoted friend; he is also the comic relief of "Myrt and Marge."

From a 1940 scrapbook.

GOOD NEWS FOR YOU!

WE HAVE SEARCHED FAR AND WIDE– AND FOUND OFFERINGS YOU'LL LIKE!

VINTAGE RADIO HAS GREAT BOOKS FOR YOU!

1927 RADIO ENCYCLOPEDIA

Own this authentic reproduction of Gernsback's classic. Browse through radio's heroes (who's Marconi?) and hardware (what's a coherer?) of the old days. 175 fascinating pages. Our hard-cover version is a serialized limited edition, an ideal gift.

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A FLICK OF THE SWITCH 1930-1950

Here's your time trip through the great days of radio broadcasting and the dawn of television. Revisit the Lone Ranger, Philco "cathedral" radios, old "Ham" days and many more. You'll revel in 312 pages of story, old ads and over 1,000 pictures.

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Here's your second edition of the 1877-1959 phono classic, now extended to 1976.

Discover the story of recorded music in 30 fascinating chapters. Enjoy photos of exotic music machines from early cylinder phonographs to stereo. Own THE reference for phonograph enthusiasts. 550 pages.

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FROM SEMAPHORE TO SATELLITE

Here is a great, big, beautiful book covering the history of worldwide wired and wireless communications in 343 pages. Printed in Europe in 1965, on the 100th anniversary of the International Telecommunications Union. Richly illustrated, with deeply embossed hard cover. Only 17 copies available in the U.S., but we found 100 copies in Europe.

A REAL SHOWPIECE FOR $19.75

VINTAGE RADIO 1887-1929

You'll enjoy this fascinating pictorial story of pioneer days in wireless and radio. Relive the days of Marconi, old spark transmitters, and the struggles of early radio broadcasting. It's the radio collector's reference, with over 1,000 pictures on 263 pages.

HARD-COVER $10.95
HANDBOOK $8.95

J.W.F. PUETT'S SILVER GHOSTS

E.H. Scott and his immortal radios have been recaptured in 72 pages of pure Scott. Includes circuit diagrams of all the truly classic models, along with old ads, articles and the story of E.H. Scott's creative life. If you have a pre-1946 Scott radio, or hope to own one some day, you've got to have this book.

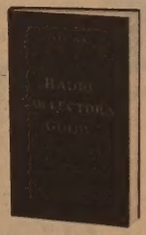
BE A SCOTT EXPERT FOR ~~$10.00~~ now only $7.95

GERNSBACK'S 1931 SERVICE MANUAL

Hugo Gernsback's 550-page manual of over 1500 pre-1932 radio diagrams is still available. We make periodic reprintings of this valuable book, to customer order. The Manual includes over 300 radio models not in Rider's manuals. Bound in a large, handsome post-type cover for easy reference.

ORDER YOURS NOW AT $40.00

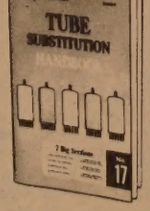
1921-1932 RADIO COLLECTOR'S GUIDE



This book makes you an "instant expert" as you go prospecting for those fine old radios. It eliminates guesswork in determining a set's age and "pedigree." There are 264 pages loaded with over 50,000 facts on 9,000 radio models made by 1,100 manufacturers.

HANDBOOK $6.95

Sam's TUBE SUBSTITUTION HANDBOOK



Here's your great helper to bring those old sets back to life. Lists over 13,000 substitutes, including American-American, American-Foreign, and Foreign-American. Use it to find substitutes, and to find out if that "odd" tube was just stuck in to fill the socket. Two-book bargain; shelf reference plus handy pocketbook, 96 pages each.

TWIN-PAK BARGAIN $2.95

MOST-OFTEN-NEEDED 1926-1938 DIAGRAMS

This reprint of Morris Beitman's Supreme Publications book shows circuit diagrams for 600 radio models. Its 240 pages are valuable for historical circuit information, and are great aids in restoring those old sets. Made from Supreme's original artwork, it is clear and readable.

HANDBOOK $7.00

Also 1941, 1942, 1948 and 1950 Editions $4.00 each.

ADD TO YOUR SHELF OF FASCINATING BOOKS!

DISCOVER THE EXCITING RADIO COLLECTOR'S HOBBY!

VINTAGE RADIO NEWS NOTES
Winter-Spring 1977

OUR NEW OFFERINGS on the front page of this flyer are the result of lots of research and poking around for new things that our friends will like. We are pleased to offer the new, enlarged FROM TIN FOIL TO STEREO, which has just been produced by Howard W. Sams. We have also been chasing FROM SEMAPHORE TO SATELLITE for some time, but found only 17 available copies in the U.S. We finally found 100 copies in Europe, and may get still more copies of this beautiful book. We couldn't pass up J.W.F. Puett's superb SILVER GHOSTS, and he had a special reprint job made for us. We're offering the Howard W. Sams TUBE SUBSTITUTION HANDBOOK because we use ours all the time, and figure you might need it, too. The speaker cord idea has been brewing for some time. We'll do headset cords later, if enough of our friends say they want them. Do you?

FEDERAL RADIO fans will want the Schamberger reproductions of instruction booklets for models 8, 9, 55/56, 57, 58, 59, 61, 102, 110, 135, 140 and Federal Junior. All these pamphlets, a total of more than 120 pages, are in an attractive Federal folder reproduction. The set is yours for the bargain price (for Federal fans, that is) of $35.00.

Free VINTAGE RADIO IRON-ONS are our latest giveaway. Here's the greatest way to get people to come to you with old radio sets. It's the Vintage Radio symbol with the message "Old Radios Turn Me On." Great for tee-shirts on you, your kids or your grandkids. We'll send one with each order.

Alan Douglas' book on radio restoration is ready to go, except for available cash. Anyone want to take a plunge in publishing?

We are pleased if our books helped you pass the wintertime away in pleasant recreation. We are also pleased to keep our offerings coming to you. Our prices are the lowest we can offer and still bring good things to you.

Very best regards,
Morgan and Gladie McMahon

NO MORE STAMP PRINTS WHEN THESE ARE GONE!

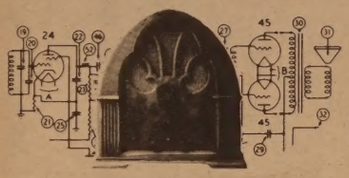
MAGNIFICENT COLOR PRINTS FROM ORIGINAL ART

These fine "Progress in Electronics" prints are the most striking artwork we've seen in years. Made from the original painting, each print is 8" x 10" with its own coordinated matte background. Prints are on beautiful heavy stock with high-quality inks. It takes nine passes through the printing press to make each of these four masterpieces!

You have a choice of prints for framing, or plaques ready to hang on your wall. Originally conceived as executive gifts by Hall-Mark Electronics, these fine pictures are made by special arrangement with the U.S. Postal Service. Now a limited edition, by Government decree. Here's the ideal gift for you, your relatives and friends!

FOUR BEAUTIFUL PRINTS FOR FRAMING, $7.50. READY-TO-HANG PLAQUE SET, $18.50

CIRCUIT DIAGRAMS



We will research any pre-1951 radio model and send you the circuit diagram and any other available repair information. We'll also tell you the year in which that model was introduced. Your money back if we don't come up with at least a circuit diagram!

We now have Canadian diagrams, too!

ANY RADIO MODEL $3.50

GET PEDIGREES FOR YOUR PET RADIOS!

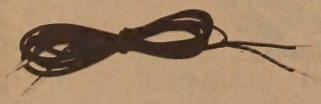
Circuit diagrams are our fastest-growing service. Some of our friends want them immediately (or sooner) to get their fine old sets playing again. Others want diagrams to add to the interest value of their collections. We will locate and send you the circuit diagram and other available information on your pre-1951 set for a paltry $3.50. Send tube layout if you can't find a model number.

MANUFACTURER	MODEL

WE WILL BUY OR SWAP for manuals and circuit books that help us help you. Please write us about what you have, with price or swap propositions.

WE WELCOME IDEAS ON HOW WE CAN SERVE YOU BETTER.

SPEAKER CORD SPECIAL



Each mailing, we try to come up with something unusual and useful. This time it's a 2-conductor speaker cord, made of traditional materials with the old-fashioned overbraid. Dark brown, with phone tips at one end and spade lugs on the other. Turn those beautiful old speakers into showpieces you can use, display or trade. Specially made; allow several weeks for delivery.

YOURS FOR $10.00,
3 FOR $27.50

DON'T WAIT; ORDER NOW FOR QUICK DELIVERY!

Send check or money order to Vintage Radio, Dep't D, Box 2045, Palos Verdes Pnsla., CA 90274
TEN-DAY GUARANTEE. WE PAY POSTAGE. CALIFORNIANS ADD 6% SALES TAX.

	$		$
	$		$
	$		$
	$		$
		Total	$

PLEASE PRINT CLEARLY!

NAME _____
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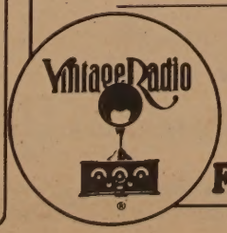

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SIX ISSUES - FOUR OR MORE PAGES PER ISSUE

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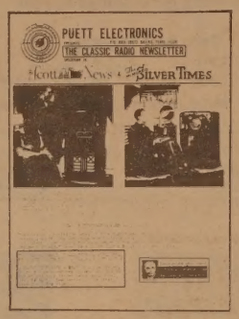
THE SCOTT QUARANTA
1935 - $2,500.00
forty tubes ------
FEATURED IN THIS ISSUE

THE McMURDO SILVER MASTERPIECE VI
1937 twenty tubes
FEATURED IN THIS ISSUE



MAR. APR. 1976

MAY - JUNE 1976

RCA VICTOR
BERKSHIRE "CONTEMPORARY"

RADIO PHONOGRAPH PROJECTION TV
1947 sixty-nine tubes
$10,000.00 ?
FEATURED IN THIS ISSUE

JUL. AUG. 1976

THE SCOTT PHANTOM DELUXE
1939 twenty tubes
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ANTIQUE RADIO POSTER by J. W. F. Puett
11 X 14 standard photo size fits available frames, printed on antique buff poster stock, madcap nostalgia $1. postpaid

NOW ONLY $7.95 POSTPAID

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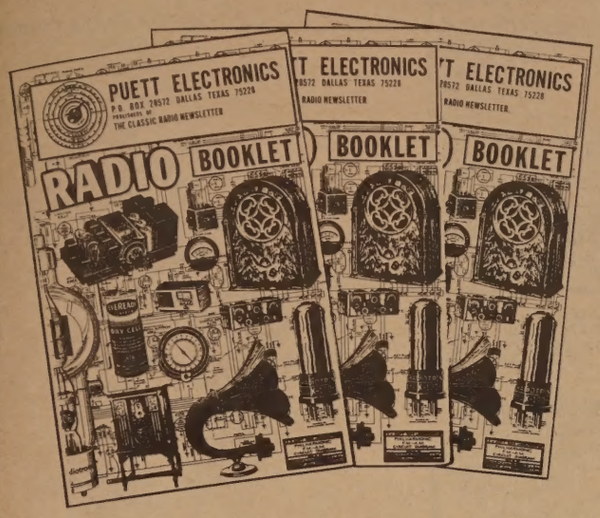
NEARLY EVERY MODEL MANUFACTURED BY THE E.H. SCOTT RADIO LABORATORIES FEATURED IN THIS 72 PAGE BOOK

Servicing Your Radio



radio ideas

BE A RADIO EXPERT

SHORT WAVE LEAGUE

FIX ANY RADIO

Use the radio to dance to? At my party?

"But of course, my dear - I just received my PUETT ELECTRONICS booklets and technical data this morning!" "I'll have that old breadboard working as good as new by party time tonight!"

$2.00 EACH POSTPAID

Radio Ideas

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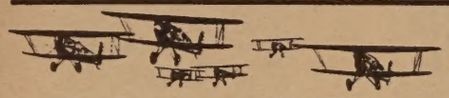
(3) THE COMPLETE RESTORATION OF AC POWERED ANTIQUE RADIOS by J. W. F. Puett
(4) WHEN WAS THAT OLD TUBE MADE? by James R. Wilkins

OTHER PUETT ELECTRONICS BOOKLETS WILL SOON BE PUBLISHED - SEE OUR NEW ACQUISITIONS LIST



IN THE AIR OR ON THE AIR

SUBSCRIBE TODAY!!!

RARE TUBES --- 01A -- 99 -- WD-11, etc. OLD RADIO BOOKS, RIDER & SAMS PUBLICATIONS, RADIO RECEIVERS, RADIO TEST & SERVICING EQUIPMENT, TUBES FOR TUBE COLLECTORS, OTHER HARD TO GET ITEMS WHICH ARE NOT LISTED IN OUR PRICE LISTS OR IN OUR CATALOG BECAUSE WE SELL OUT OF THESE ITEMS QUICKLY.

NEW ACQUISITIONS LIST subscription rate - $2.00 per year - 4 to 6 issues

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RADIO ANTENNA

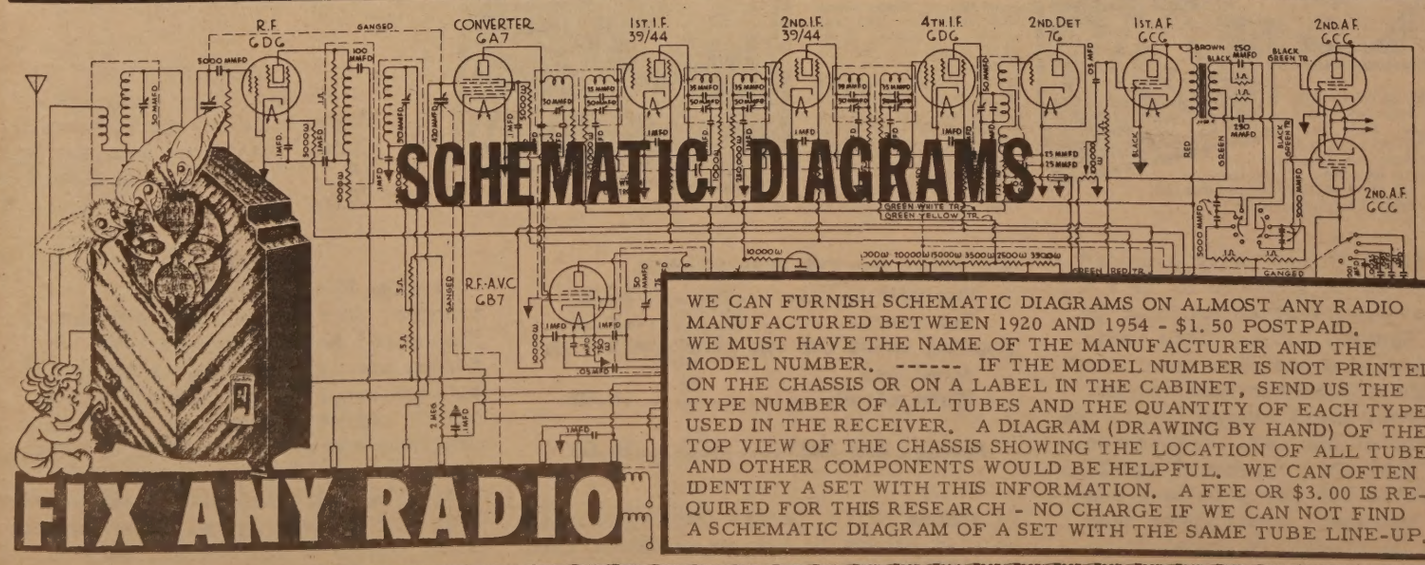
THE PUETT ELECTRONICS SUPER ANTENNA - GROUND SYSTEM

EXTREMELY HIGH GAIN, ALLWAVE, HIGH IMPEDANCE, OMNI-DIRECTIONAL, EASY TO CONSTRUCT, TAKES UP VERY LITTLE SPACE, IDEAL FOR ANTIQUE RADIO RECEIVERS, SHORT-WAVE AND BROADCAST LISTENERS. PLANS $2. POSTPAID.

RADIO

LISTS - DATA

(1) **LIST OF ANTIQUE RADIO SERVICES** --- Sources to obtain tubes, books, periodicals, parts, radio receivers, antique radio service and restoration, radio shows on tape, speaker re-coning, tube adapters, schematics and technical data, directory of radio collectors, antique TV, telegraph keys, tube cartons, battery set power supplies, bakelite panel engraving, antique radio clubs, --- others etc. $2.00 postpaid.
(2) LIST OF MILITARY (VT) TUBE TYPE NUMBERS VERSUS COMMERCIAL TUBE TYPE NUMBERS -- $1.00 postpaid.
(3) CLASSIC RADIO LISTS - Directory of Classic Radio Collectors - 50¢, List of Classic Radio Serial Numbers - 50¢, List of Classic Radio Literature - $1.00 all postpaid.
(4) TUBE DATA -- We will furnish data on any tube - research fee $1.00 postpaid.
(5) List of Military Radio Equipment Manuals which we have for sale - send first class postage stamp.



SCHEMATIC DIAGRAMS

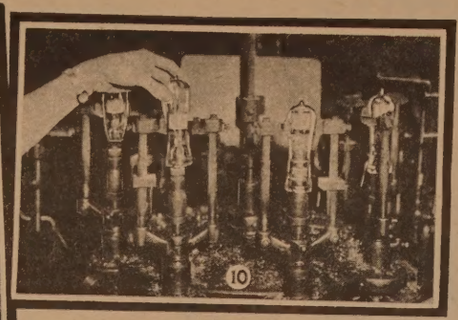
WE CAN FURNISH SCHEMATIC DIAGRAMS ON ALMOST ANY RADIO MANUFACTURED BETWEEN 1920 AND 1954 - $1.50 POSTPAID. WE MUST HAVE THE NAME OF THE MANUFACTURER AND THE MODEL NUMBER. ------ IF THE MODEL NUMBER IS NOT PRINTED ON THE CHASSIS OR ON A LABEL IN THE CABINET, SEND US THE TYPE NUMBER OF ALL TUBES AND THE QUANTITY OF EACH TYPE USED IN THE RECEIVER. A DIAGRAM (DRAWING BY HAND) OF THE TOP VIEW OF THE CHASSIS SHOWING THE LOCATION OF ALL TUBES AND OTHER COMPONENTS WOULD BE HELPFUL. WE CAN OFTEN IDENTIFY A SET WITH THIS INFORMATION. A FEE OR $3.00 IS REQUIRED FOR THIS RESEARCH - NO CHARGE IF WE CAN NOT FIND A SCHEMATIC DIAGRAM OF A SET WITH THE SAME TUBE LINE-UP.

FIX ANY RADIO

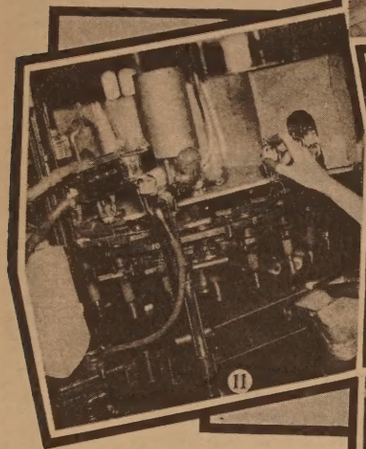
(8) *Automatic Stem Bender* — Stems taken from the machine shown in Figure 7 are then placed in this device which is controlled by a foot-operated clutch. When this machine is operated all of the lead wires are cut to the proper length.

(9) *Mount Assembly*—The operator in this picture is using a machine similar to the one shown in Figure No. 2. The difference lies in the fact that all of the assembly which has been finished by the process shown in Figure No. 2 is now joined to the rest of the elements, making a complete "Mount," ready for inserting into the glass envelope or bulb.

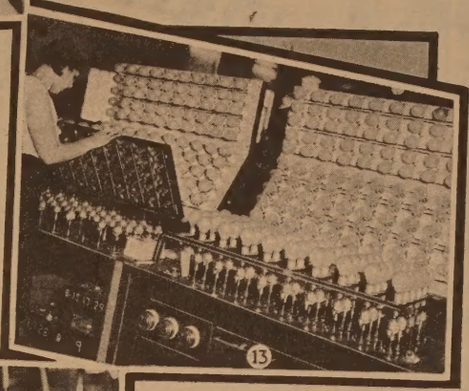
After the "Mount" is completed, the unit goes to the "sealing-in" machine.



(10) *Sealing-In Machine*—The machine here is somewhat similar to the flare-making machine in that the operation includes passing the elements for the tube through a number of gas fires of gradually increasing temperatures.



(11) *Exhaust and Sealing Machine*—The entire tube assembly is run through this machine in such a manner as to drive off all of the gases and pump them out along with all the air in the bulb. The heavy coil of wire directly above the heavy insulated lead wires, is a high frequency coil, used for heating the elements within the tube, while it is being evacuated. The heat of the elements is produced purely by the inductive effect of the high frequency current passing through the coil. A "getter" explodes, giving a "silvery" appearance.



(13) *Aging Rack*—This highly interesting section of the production line indicates, by means of the banks of ordinary incandescent lamps, just exactly the condition of each tube as it comes through production. The finished vacuum tubes are placed in sockets which are connected to normal operating voltages. The current is then turned on and each tube has to be aged for a given period at specified voltages. If there is a short circuit between a plate and grid of one of the tubes, one of the lights in the bank to which that particular tube is connected indicates that fact to the operator. Other lights detect other troubles. This is true of any other flaws which might take place in the tube and the operator is therefore able to throw out those that are faulty.

(12) *Automatic Basing Machine* — Here, the completely evacuated and sealed assembly, taken from the former operation, is attached to the base. The base is already fitted with the requisite number of tubular metal prongs. The lead wires are put through these tubular prongs, by the operator, before the tube and the base are placed in the basing machine. The base, itself, is filled with a specially prepared cement. These assembled units are then put through a circular oven, which is held at a constant temperature.

(14) *Test Table*—A table, of this character, is at the end of each production line. It is fitted with nine delicate meters and is used to measure ten different characteristics of each tube. These test tables are of the very latest design and are the work of the Triad Engineering Staff.

(15) *Packing*—All of the highly developed Engineering work in a modern tube plant can be knocked into a "Cocked Hat" if the tubes are not satisfactorily packed. After shipping millions of tubes to all parts of the world the Triad Company has standardized on a system of wrapping.

California Historical Radio Society
c/o San Jose Historical Museum
635 Phelan Avenue
San Jose, CA 95112

Canadian Vintage Wireless Association
c/o Mr. Sid Prior
102 Parkhurst Blvd.
Toronto, Ontario, M4G 2E6
Canada

DeForest Pioneers
254 Vincent Ave.
Lynbrook, NY 11563
(Ex-associates of Dr. DeForest and his enterprises)

Indiana Historical Radio Society
c/o Mr. Ed Taylor
245 N. Oakland Ave.
Indianapolis, IN 46201

Mid-America Antique Radio Club
c/o Dr. Robert Lane
2301 Independence Ave.
Kansas City, MO 64214

Northwest Vintage Radio Society
Box 13544
Portland, OR 97213

Old-Old Timers Club
c/o Mr. Ray Meyers
Box B
San Gabriel, CA 91778
(Early-time radiomen only)

Quarter-Century Wireless Association
c/o Mr. John DeBardelben
2012 Rockingham St.
McLean, VA 22102
(Hams on the air over 25 years ago)

Rocky Mountain Antique Wireless Association
16500 W. 12th Drive
Golden, CO 80401

Southern California Antique Radio Society
c/o Mr. Alan Smith
6712 Bisby Lake Ave.
San Diego, CA 92119

Society of Wireless Pioneers
c/o Mr. Bill Breniman
PO Box 530
Santa Rosa, CA 95402

Southwest Vintage Radio and Phonograph Society
Box 19406
Dallas, TX 75219

This list of clubs is due to the generosity of Morgan McMahon of Vintage Radio.

SVRPS AUCTION

At the Texas Power and Light building in Richardson, Texas, 6:00 p.m. Saturday April 16, 1977. Call John Alford 352-8834.

The first commercially produced car radio we have record of is a 5 valve battery receiver produced by Freed - Eisman, U.S.A. This radio was basically a modified version of one of their domestic home radios with a front panel shaped to fit the dash board of the car. However we suspect that this "pioneer" model was a little too early to be a commercial success. From: Tudor Rees (Vintage Services), 64 Broad St., Staple Hill, Bristol BS16 5NL, Breat Britain.

New rates for THE HORN SPEAKER

One year.....$5.50
Two years.....9.00
Special rates for one year (mailed in envelope)
First class.....8.50

Foreign Air Mail.....16.00

Telephone call! George Campbell wants to meet others in his area. His address is: 232 Roanoke Ave., Roanoke Rapids N.C. 27870/

LITERATURE

Vintage Radio, Puett Electronics, Supreme Publications and Historical Radio Services have formed special departments to assist antique radio set collectors in securing needed literature, service diagrams and manuals. Most of these companies run large ads and you should be delighted with their services. They are using original Rider manuals, older Sams and Supreme and many vintage factory service manuals are always on hand.

MART

Classified ad rate: 6¢ per word.
Photo ads: $2.00 extra.

Deadline: 20th of the preceding month.

MISC.

"RADIO AGE," a radio magazine devoted to wireless and early broadcast eras. Contains interesting articles written by collectors, articles published in early radio magazines, lots of reprints of famous radio ads, and a classified section for buying or selling radio and electronic items. Subscribe at $7.50 per year for ten issues. Mail check or money order to Radio Age, 1220 Meigs Street, Augusta, Georgia 30904.

FOR SALE OR TRADE

FOR SALE: 1918 Duck Catalog (No. 11), profession reprint, 240 pages with hundreds of illustrations. For those interested in pre-1920 wireless this is an invaluable reference, loose couplers, spark gaps, crystal detectors, bread boarded receivers/transmiters with schematics. Excellent quality, satisfaction guaranteed, $7. post paid.

For Sale; AK35, Federal A-10, Crosley 51, Radiola 18 with 100A spk., Scott, early QSTs, Federal Jr., for trade, etc., SASE for details.
Dick Schamberger, 1975 Hertel Ave., Buffalo N.Y. 14214.

FOR SALE: Have quantity of Victor, Columbia, Cheney, Sonora, Edison and others in both table and upright model Victrolas. All in excellent working order. Also have restored early 1930's Radios in both Cathedral and Console models. Some battery radios. Send SASE for list. Will do restoration work for anyone desiring same. Philip Guinan, Route 1, Page Road, Hudson N.H. 03051. Ph: 603 883-8586.

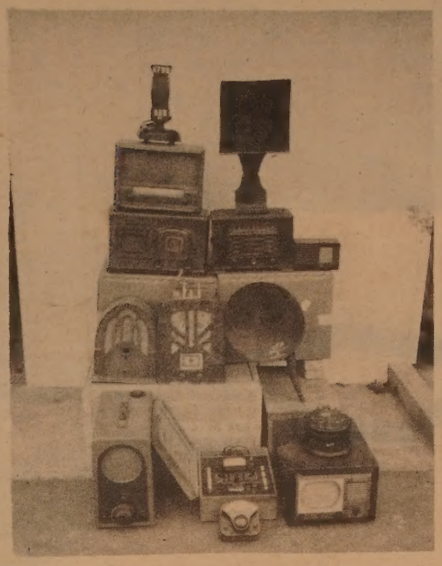
WE ARE COMPILING a catalogue of early day radio test equipment. Pictures, catalogues and literature of this early day radio test equipment is needed. Give particulars and price in first correspondence. Wm. L. Poston, 3212 Peach Tree Ct., Bakersfield CA 93301.

SELL ANTIQUE TESTERS DAYRAD analyzer series 50 $45; General radio 1614A bridge $18; Weston 155 in wooden case 15 ampere AC, 1 ampere AC and 50 volts AC $17.50 each. Robert Ireland, Pleasant Valley N.Y. 12569.

RARE TUBE REPLACEMENTS-1940 STYLE WD11A--$15.; WD11R--$10.; V99R--$7.; X99R--$5. "A"..meals newer type and "R"..means direct replacement type. K. Hanson, 3403 E. Broadway, Long Beach, California 90803.

HAVE SCARCE OLD RADIO - TV tubes. Also some old radios. SASE for prices. Harold's Radio, 3106 N. 3rd., Harrisburg PA 17110.

FOR SALE OR TRADE



FOR SALE: Philco Radio $10; G. E. Radio $30.;Horn $35.; Coronado Radio $20./ Detrola Radio $20.; KFWB Radio $35.; Drosley Cathederal cabinet $45.; Philco Dome Radio $35.; Magnovox Horn $45.; 7" Teletone Television $50.; Supreme tubetester $30.; Thompson 1903 Voltmeter $45.; Victor Round Transformer $30.; 7" Emerson Television $75.; More. Serious must sell. Consider offers. Call 503 476-1078. Trade for phonographs or parts horns. Chuck Seidel, 925 Starlite Place, Grants Pass, Oregon 97526.

FOR SALE: Surplus new, used, or removed from equipment AC-DC radio parts, variable tuning condensers assorted 5 for $1.00; assorted PM speakers 2½" to 5" some with output transformer 4 for $1.90; assorted loop-stick antennas 12 for $1.00; IF transformers assorted 10 for $2.00; output transformers 4 for $1.00; Selenium rectifiers assorted 6 for $1.00. Elmer Nelson, 824 So. Pleasant St., Princeton IL 61356.

FOR SALE: 1930 Majestic Low Boy, completely restored, plays fine, cream puff. $100. Appx.
James Antaki, 311 Bear Rider Rd., Pleasantville N.Y. 10570.

FOR SALE: 2000 assorted Radio Magazines, books, radio paper items, ask for list #R-P-3-77, send 50¢ and long SASE. Frank Krantz, 100 Osage Ave., Somerdale N.J. 08083.

RIDER MANUELS: volumes, abridged 1-5 complete 6-16, also Rider TV manuels. Jim Antaki, 311 Bear Ridge Rd. Pleasantville N.Y. 10570.

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WANT Aeriola, Sr. in any condition.
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WANTED: "Radio News" magazines for Jan., Feb., Mar., April, May, June 1920; July 1921; July, Aug., Sept., Oct., Dec. 1922; Jan., Feb., April, May, June 1923; March 1924; Aug., Sept. 1929; June, Dec. 1932; Dec. 1934; Jan., Feb., June, July, Nov., Dec. 1935; Have available for trade or sale some in '26, '27, '28 and 1929. Les Rayner, 5512 N. 71st. Place, Scottsdale, Arizona 85251.

WANTED: Any radio fan magazines. Also, any radio magazine with commercial broadcast or star information. Examples, "Radio Guide, Radio Stars, Radio-TV Mirror," etc. Also "Photoplay" magazines. 1 or a 100. Fred L. Davis, 5106 Skippy Street, Memphis, Tennessee 38116.

WANTED: Car radios and literature, vibrators, parts, original equipment types 30's, 40's and 50's. Also early Chevrolet and Ford AM-FM Town & Country, Wonderbar. For cash. Please describe and price. Marvin Roth, 14500 LaBelle, Oak Park, Michigan 48237.

WANTED TO BUY: Test equipment from the 20s and 30s mint condition preferable. Give complete discription, condition and price prepaid and insured in first correspondence. Picture will be helpful. Wm. L. Poston, 3212 Peach Tree Ct., Bakersfield CA 93302.

WANTED: Horn phonos, parts, music boxes, player organs, wind-up toys, crystal radios, animated and novelty clocks and watches. Top cash paid plus trades, etc. S. Leonard, P.O. Box 127, Albertson, L.I., N.Y. 11507.

WANTED: Electrolas XVI, XVII, XVIII, 8-30, 9-25, 8-60, 10-50, 10-51, 9-16, 9-18, 120, 9-54, 9-56, Edison C-1, C-2, Scott Wellington, Early Capehart. T. Grattelo, 2818 Central, Alameda CA 94501.

WANTED: Scott, McMurdo Silver, Lincoln, and other classic receivers. Also pre-1930 Battery sets, speakers, mikes, etc. J. E. Cunningham, 23W 675 Ardmore, Roselle, IL 60172.

WANTED: "Radio News" for 1919, 1922. "CQ" 1945. Driver and base for Atwater-Kent L and Brandes horns. R. McNeill, Box 472, Yorkton, Sask., CANADA S3N 2W4.

WANTED: Speaker for Zenith model VII. George W. Byrd, Sr., 14 N. Bridge St. Highland Springs VA 23075.

WANTED: Radios with Kellogg or McCollough tubes, 401 tubes, parts, literature. M. Rosenthal, 507 S. Maryland Ave., Wilmington DE 19804.

WANTED: Pre-1940 TVs also will pay $100. for restorable Pilot TV-37. Bill Russell, 6463½ Fulton, Van Nuys CA 91401.

WANTED: Crosley 51 and AK 20. Fenton M. Wood, 3122 Ann Arbor, Sugar Land TX 77478.

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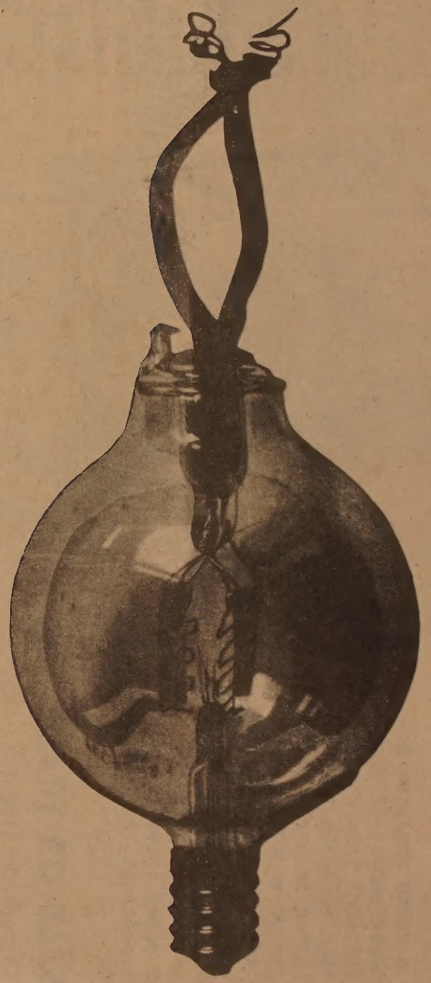

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